

**AMENDMENTS TO THE CLAIMS**

1. (Cancelled)
2. (Cancelled)
3. (Previously Presented) The machine according to claim 20, in which the measurement element is adapted to detect changes in voltage caused by differences in brightness.
4. (Previously Presented) The machine according to claim 20, comprising a plurality of light sources of different colours.
5. (Previously Presented) The machine according to claim 20, further comprising a collecting device for the waste, wherein the photoelectric sensor is arranged to monitor waste in the collecting device.
6. (Previously Presented) The machine according to claim 5, in which the collecting device is a pneumatic pipe-line.
7. (Previously Presented) The machine according to claim 5, in which the collecting device is a suction removal hood.
8. (Previously Presented) The machine according to claim 5, in which the waste is conveyed through the collecting device.
9. (Previously Presented) The machine according to claim 5, in which the photoelectric sensor is arranged in a wall region of the collecting device.

10. (Previously Presented) The machine according to claim 5, in which there are a plurality of suction removal hoods and guide vanes, and at least one separate photoelectric sensor is associated with each suction hood location or each guide vane.
11. (Previously Presented) The machine according to claim 5, comprising a central waste-collecting line, the photoelectric sensor being associated with the central waste-collecting line.
12. (Cancelled)
13. (Currently Amended) The machine according to claim 20, comprising a control device adapted to compare the measured ~~results~~ electrical signals with prespecified quantities and, in the event of a departure therefrom, effect a modification of the waste separation.
14. (Currently Amended) The machine according to claim ~~[[12]]~~ 20, which comprises at least one waste separation element being adjustable in dependence on measurement results from the evaluation device.
15. (Previously Presented) The machine according to claim 14, in which the or each waste separation element is a guide vane or a separating blade.
16. (Previously Presented) The machine according to claim 14, which further comprises at least one angle-measuring device, the angle-measuring device and the evaluation device being connected to a control and regulation device.

17. (Currently Amended) The machine according to claim 20, in which the ~~measurement results~~ measured electrical signals are usable in a control and regulation circuit for optimizing the cleaning of the fibre material.

18. (Previously Presented) The machine according to claim 20, in which the sensor arrangement is adapted to detect a blockage of fibre material in the collecting device.

19. (Cancelled)

20. (Currently Amended) A spinning preparation machine in which waste is separated from fibre material, comprising:

an apparatus through which the waste moves, the waste comprising good fibers and contaminants;

a sensor arrangement comprising a light source adapted to project light onto the waste, and a photoelectric sensor adapted to detect light reflected solely from the good fibers located in the waste and convert the reflected light into electrical signals; ~~and~~

a measurement element adapted to measure the electrical signals; and

an electronic evaluation device arranged to determine one or more parameters selected from: the variation of the brightness of the light reflected solely by the good fibres; the coefficient of variation of the brightness of the light reflected solely by the good fibres; and the standard deviation of the brightness of the light reflected solely by the good fibres.

21. (Currently Amended) A spinning preparation machine in which waste is separated from fibre material, comprising:

a collecting device through which the waste moves, the waste comprising good fibers and contaminants;

at least one sensor arrangement associated with the collecting device, the sensor arrangement comprising a light source adapted to project light onto the waste, and a photoelectric sensor adapted to detect light reflected solely by the good fibres in the waste and convert the reflected light into electrical signals; and

a measuring element adapted to measure the electrical signals; and

an electronic evaluation device arranged to determine one or more parameters selected from: the variation of the brightness of the light reflected solely by the good fibres; the coefficient of variation of the brightness of the light reflected solely by the good fibres; and the standard deviation of the brightness of the light reflected solely by the good fibres.